

**CLAIM(S)**

**What is claimed is:**

1. An ink jet printable composition comprising
  - (a) functional material;
  - 5 (b) organic polymer comprising polyvinylpyrrolidone; dispersed in
  - (c) dispersion vehicle selected from organic solvent, water, or mixtures thereof;and wherein the viscosity of said composition is between 5 mPa.s  
10 to 50 mPa.s at a temperature of 25 to 35°C.
2. The composition of Claim 1 further comprising up to 10 wt.% inorganic resinate as binder precursor.
- 15 3. The composition of Claim 2 wherein said inorganic resinate is silver resinate or a mixture of metal resinates.
4. The composition of Claim 1 wherein said functional material  
20 is a conductive functional material.
5. The composition of Claim 1 wherein said organic polymer is further comprised of other polymers selected from the group comprising polymethacrylates and polyacrylates.
- 25 6. The composition of Claim 1 further comprising a monomer wherein said monomer is ultraviolet curable or thermally curable.
7. The composition of Claim 6 wherein said monomer is selected from the group comprising triethylolpropane ethoxy triacrylate,  
30 trimethylolpropane triacrylate, pentaerythritol triacrylate, pentaerythritol trimethacrylate, trimethylolpropane trimethacrylate, pentaerythritol tetraacrylate, pentaerythritol tetramethacrylate, triethylene glycol diacrylate, triethylene glycol dimethacrylate, polyoxyethylated trimethylol-

propane triacrylate, ethylated pentaerythritol triacrylate, dipentaerythritol monohydroxypentaacrylate and 1,10-decanediol dimethlacrylate.

8. The composition of Claim 1 wherein said functional material  
5 is present in the range of 1-60 wt.%, based on total composition.

9. The composition of Claim 1 wherein said organic polymer is  
present in the range of 1-10 wt.%, based on total composition.

10 10. The composition of Claim 1 wherein said dispersion vehicle  
is present in the range of 40-95 wt.%, based on total composition.

11. The composition of Claim 6 further comprising a  
photoinitiator.  
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12. The composition of any one of Claims 1-7 wherein said  
organic solvent is selected from aliphatic alcohols, esters of aliphatic  
alcohols, terpenes, ethylene glycol, esters of ethylene glycol, carbitol  
esters or mixtures thereof.  
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13. The composition of Claim 4 wherein said conductor material  
is coated with a fatty acid surfactant selected from the group comprising  
stearic acid, palmitic acid, a salt of stearate, a salt of palmitate and  
mixtures thereof.  
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14. An application package which comprises a cartridge and the  
composition of Claim 1 wherein said cartridge is suitable to disperse said  
composition in an ink jet system.